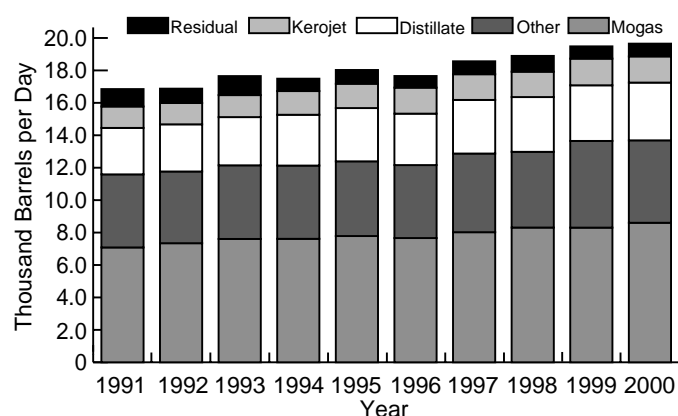


# Highlights

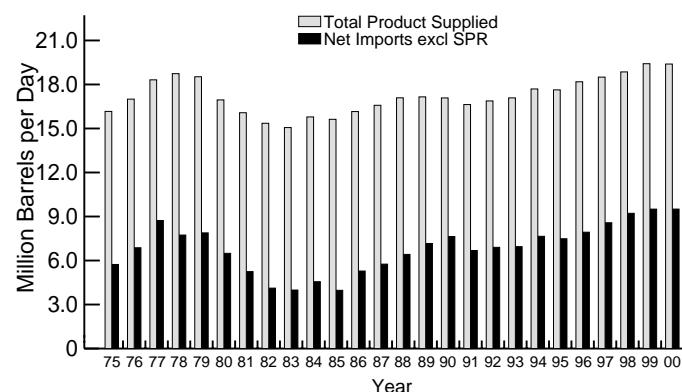
September marked a record high for this time of year as demand for petroleum products increased 2.7 percent compared to a year ago. Demand for petroleum products in September<sup>1</sup>, measured as product supplied, averaged 20.0 million barrels per day (Table H1 and Figure H1). For the year, demand is averaging 19.4 million barrels per day. To meet this demand, reliance on foreign petroleum remains substantial. Year-to-date, net imports of petroleum (excluding crude oil for the Strategic Petroleum Reserve) account for 49 percent of U.S. demand (Figure H2). Fueling the record demand were temperatures that on average, were 8.4 percent warmer than normal and 5.0 percent warmer than this time last year.<sup>2</sup>

**Figure H1. Total Demand, 1991-Current, Comparison in September for Petroleum Products**



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

**Figure H2. Total Product Supplied and Net Imports (excl SPR), Year-to-Date September Comparisons, 1975-2000**



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

September 2000 and year-to-date highlights include:

- Finished motor gasoline **demand** and **production** both set **record highs for the month**, at 8.3 million barrels per day and 8.2 million barrels per day respectively. For the year, demand is averaging 8.3 million barrels per day and production is up to 8.1 million barrels per day. End-of-month **stocks** of finished motor gasoline totaled 154.6 million barrels.
- Distillate fuel oil **demand** and **production** also set **record highs for the month**, each averaging 3.8 million barrels per day. Year-to-date, both demand and production are on a record pace of 3.6 and 3.5 million barrels per day, respectively. Distillate fuel oil **stocks** climbed to 114.1 million barrels by month's end.
- Residual fuel oil **demand** and **production** both increased compared to last September's monthly average. While September's averages reflected growth compared to a year-ago, year-to-date they each reflect continuing declines. **Stocks** fell to 36.2 million barrels by month's end.
- Kerosene-type jet fuel **demand** set a **record high for the month** as well, at 1.8 million barrels per day. **Production** reached the second highest average for the month ever at 1.6 million barrels per day. For the year, demand for kerosene-type jet fuel is up to 1.7 million barrels per day while production is up to 1.6 million barrels per day, both are respective highs. End-of-month kerosene-type jet fuel **stocks** totaled 43.0 million barrels.
- Propane inventories ended the month at 61.5 million barrels, **2.1 million barrels ahead of this time last year**.
- Domestic crude oil **production** fell to an average of 5.8 million barrels per day in September, thus matching the steadily declining year-to-year average. Alaskan field production declined to an average of 893 thousand barrels per day in September helping to lower the yearly average to 965 thousand barrels per day. **Imports** reached a **record high for the month** at 9.2 million barrels per day. Since the first of the year, imports are at a record pace of 8.9 million barrels per day. End-of-month crude oil **stocks** (excluding the Strategic Petroleum Reserve) fell to a total of 287.0 million barrels, 16.6 million barrels below last September's month-end total.
- Refinery **inputs** of crude oil set a **record for the month** at 15.6 million barrels per day. For the year, inputs remained on a record pace at 15.1 million barrels per day.

<sup>1</sup>September 2000 data are monthly-from-weekly estimates based on the Energy Information Administration's Weekly Petroleum Supply Reporting System.

<sup>2</sup>"Cooling Degree Day Data Monthly Summary, Monthly Data for September 2000", *National Oceanic and Atmospheric Administration*, accessible via the Internet at <http://www.cpc.ncep.noaa.gov/>.

**Table H1. Petroleum Supply Summary**  
(Million Barrels per Day, Except Where Noted)

Category	2000			1999	January - September	
	Estimated September	August	Difference <sup>a</sup>	September	2000	1999
<b>Products Supplied</b> .....	20.0	20.2	-0.2	19.5	19.4	19.4
Finished Motor Gasoline.....	8.3	8.8	-0.4	8.3	8.3	8.4
Distillate Fuel Oil.....	3.8	3.7	0.1	3.4	3.6	3.5
Residual Fuel Oil .....	0.9	0.9	(s)	0.8	0.8	0.8
Jet Fuel.....	1.8	1.8	-0.1	1.6	1.7	1.7
Other Petroleum Products <sup>b</sup> .....	5.2	5.1	0.2	5.3	4.9	5.0
<b>Crude Oil Inputs</b> .....	15.6	15.6	-0.1	15.1	15.1	14.9
<b>Operating Utilization Rate (%)</b> .....	96.8	97.1	-0.3	95.0	94.4	94.1
<b>Imports</b> .....	11.3	11.8	-0.5	10.7	11.0	11.1
<b>Crude Oil</b> .....	9.2	9.9	-0.6	8.5	8.9	8.9
Strategic Petroleum Reserve .....	0.0	0.0	0.0	(s)	(s)	(s)
Other.....	9.2	9.9	-0.6	8.5	8.9	8.9
<b>Products</b> .....	2.1	2.0	0.1	2.1	2.1	2.2
Finished Motor Gasoline.....	0.3	0.3	(s)	0.3	0.3	0.4
Distillate Fuel Oil.....	0.2	0.2	(s)	0.2	0.3	0.3
Residual Fuel Oil .....	0.2	0.3	(s)	0.3	0.2	0.3
Jet Fuel.....	0.1	0.2	-0.1	0.2	0.1	0.1
Other Petroleum Products <sup>c</sup> .....	1.2	1.0	0.2	1.1	1.1	1.2
<b>Exports</b> .....	1.0	1.1	-0.1	0.9	1.0	0.9
Crude Oil .....	0.1	(s)	0.1	(s)	0.1	0.1
Products .....	0.9	1.1	-0.2	0.9	0.9	0.8
<b>Total Net Imports</b> .....	10.3	10.8	-0.5	9.8	10.0	10.2
<b>Stock Change<sup>d</sup></b> .....	-0.1	-0.2	0.1	-0.2	0.2	-0.1
Crude Oil .....	-0.1	0.2	-0.3	-0.4	(s)	-0.1
Products .....	(s)	-0.4	0.4	0.1	0.2	-0.1
<b>Total Stocks</b> .....	1,532	1,537	-5	1,615	—	—
<b>(million barrels)</b>						
<b>Crude Oil</b> .....	858	862	-4	879	—	—
Strategic Petroleum Reserve <sup>e</sup> .....	571	571	-1	575	—	—
Other.....	287	290	-4	304	—	—
<b>Products</b> .....	674	676	-1	736	—	—
Finished Motor Gasoline.....	155	152	3	162	—	—
Distillate Fuel Oil <sup>f</sup> .....	114	111	3	145	—	—
Residual Fuel Oil .....	36	37	-1	41	—	—
Jet Fuel.....	43	43	(s)	49	—	—
Other Petroleum Products <sup>c</sup> .....	326	333	-6	339	—	—

<sup>a</sup> Difference is equal to volume for current month minus volume for previous month.

<sup>b</sup> Includes crude oil product supplied, natural gas liquids, liquefied refinery gases (LRG's), other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and jet fuel.

<sup>c</sup> Includes natural gas liquids, liquefied refinery gases (LRG's), other liquids, and all finished petroleum products except finished motor gasoline, jet fuel, distillate fuel oil, and residual fuel oil.

<sup>d</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase.

<sup>e</sup> Crude oil stocks in the Strategic Petroleum Reserve include non-U.S. stocks held under foreign or commercial storage agreements.

<sup>f</sup> Distillate stocks located in the "Northeast Heating Oil Reserve" are not included.

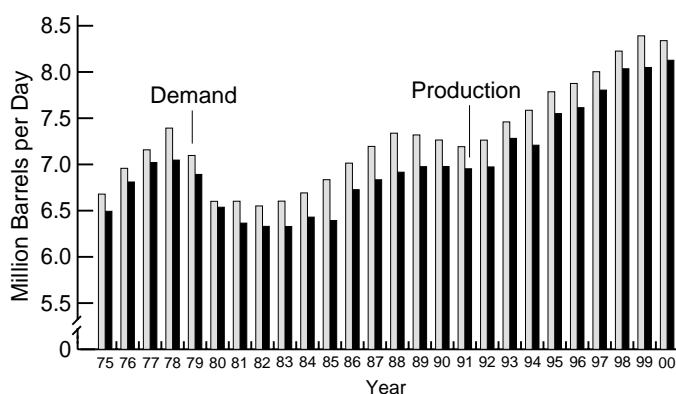
(s) = Less than 0.05 million barrels per day, or less than 0.05 percent, or less than 0.5 million barrels.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA), 1999, *Petroleum Supply Annual*, Volume 2; appropriate issues of the *Petroleum Supply Monthly* and the *Weekly Petroleum Status Report*.

Data for the current month are preliminary estimates, based on weekly submissions. For an explanation of estimation methodology and accuracy, see Appendix A of *Weekly Petroleum Status Report* and the article, "Accuracy of Petroleum Supply Data", published in the December 1999, *Petroleum Supply Monthly*.

**Figure H3. Finished Motor Gasoline, Year-to-Date September Comparisons, 1975-2000**

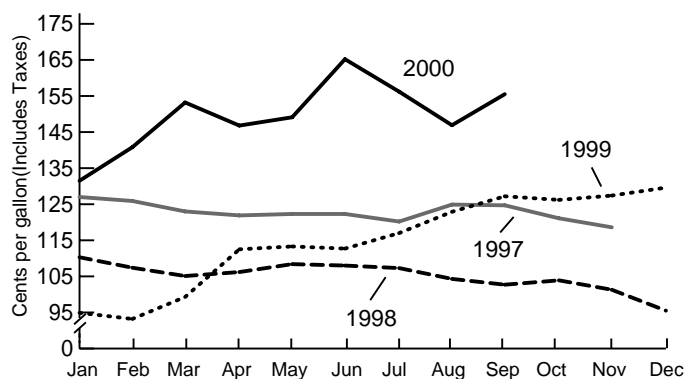


Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

## Motor Gasoline

**Demand** for finished motor gasoline set a **record high for September** averaging 8.3 million barrels per day. Still, demand for finished motor gasoline is down slightly from last year's record pace to an average of 8.3 million barrels per day (Figure H3). The average retail price for conventional motor gasoline rose nearly 6.0 percent in September to \$1.555 a gallon (Figure H4).<sup>3</sup> **Production** of finished motor gasoline also set a **record high for September** averaging 8.2 million barrels per day. For the year, production of finished motor gasoline is up from the prior record to an average of 8.1 million barrels per day. **Imports** of finished motor gasoline reached their lowest average for the month since 1997 at 308 thousand barrels per day. This brought the year-to-date imports average down to 343 thousand barrels per day. Meanwhile, **exports** of finished motor gasoline, year-to-date, are averaging 120 thousand barrels per day.

**Figure H4. Price for Conventional Motor Gasoline, 1997-current**



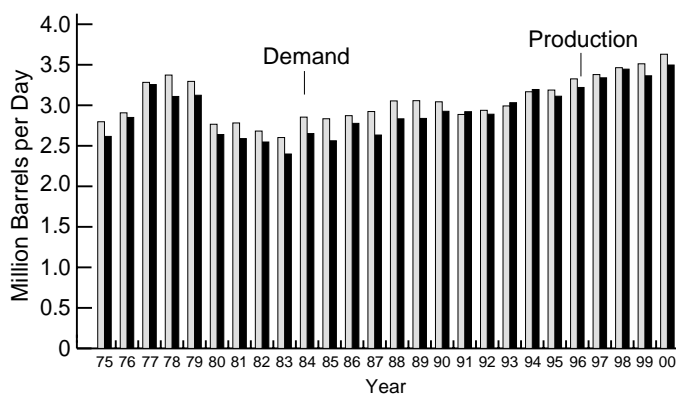
Source: Energy Information Administration, *Weekly Petroleum Status Report*, DOE/EIA-0208 (various issues).

**Stocks** of finished motor gasoline ended the month totaling 154.6 million barrels. This represents the **lowest total for the month since the data series began in 1981**. Compared to this time last year, stocks of other finished motor gasoline are down 6.6 percent to 112.6 million barrels. Reformulated motor gasoline stocks are up 2.1 percent to 41.2 million barrels and oxygenated stocks are down 42.8 percent to 0.8 million barrels.

## Distillate Fuel Oil

September was another busy month for distillate fuel oil. First, traffic on U.S. rail roads steamed ahead of last September's average and year-to-date, intermodal traffic reflects a 3.2 percent increase.<sup>4</sup> Additionally, the attention given to the tight supply situation by the media and politicians may have prompted early fuel buying by consumers and distributors resulting in an early peak in demand.<sup>5</sup> Distillate fuel oil **demand** set a **record high for September** at an average of 3.8 million barrels per day. For the year, demand is up 3.4 percent from the prior record to 3.6 million barrels per day (Figure H5). Distillate fuel oil **production** reached a record 3.8 million barrels per day in September setting an **all-time high**. Over the past nine months, production of distillates has also been on a record pace, averaging 3.5 million barrels per day. While imports of distillates were down compared to this time last year, they were within their normal seasonal ranges. Distillate fuel oil **imports** for the month averaged 240 thousand barrels per day and 254 thousand barrels per day for the year. On the flip side, **exports** of distillate fuel oil **are up to their highest average since 1996** at 163 thousand barrels per day, year-to-date. Exports have increased this year due to strong European demand as supplies abroad remain tight as well and prices have been high enough to attract supplies.<sup>6</sup>

**Figure H5. Distillate, Year-to-Date September Comparisons, 1975-2000**



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

<sup>3</sup>"Table 16. U.S. Retail Motor Gasoline and On-Highway Diesel Fuel Prices, 1999 to Present", *Weekly Petroleum Status Report*, October 13, 2000, p. 27.

<sup>4</sup>"Rail Intermodal Traffic Cracks 200,000 For First Time", *Association of American Railroads*, October 5, 2000, accessible via the Internet at <http://www.aar.org/>.

<sup>5</sup>"Data Suggest That Heating Oil Demand Peaked Early This Year", *The Oil Daily*, October 6, 2000, p. 2.

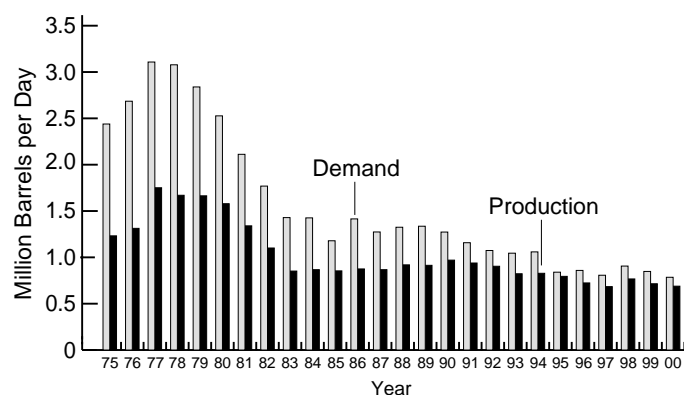
<sup>6</sup>"Despite US Demand, Products Head to Europe", *The Oil Daily*, September 29, 2000, p. 1 & 2.

Despite the tight supply situation for heating oils, backwardation in the market leaves little incentive for building domestic supplies.<sup>7</sup> As a result, distillate fuel oil stocks continued below their normal seasonal levels through September, 114.1 million barrels at month's end. This month-end total represented the **lowest for the month in over 37 years and a decline of 31.3 million barrels compared to this time last year.** Compared to September 1999, low-and high-sulfur distillate fuel oil stocks were down 8.8 and 34.3 percent, respectively. Low-sulfur distillates, typically considered for use in on-highway diesel engines, totaled 66.5 million barrels. High-sulfur distillates, primarily used for space heating and electric power generation, totaled only 47.5 million barrels. **As the winter heating season approaches and stocks of heating fuels remain tight the newly created Northeast Heating Oil Reserve stood nearly two thirds full by month's end.**<sup>8</sup>

## Residual Fuel Oil

**Demand** for residual fuel oil averaged 875 thousand barrels per day in September. Over the last nine months, demand shrank to 785 thousand barrels per day, the lowest average for the period in more than three decades (Figure H6). **Production**, at 753 thousand barrels per day, reached **the highest average for September since 1995.** Year-to-date production is down, averaging 689 thousand barrels per day. **Imports** averaged 242 thousand barrels per day for the month and 231 thousand barrels per day year-to-date, both down from the respective periods a year ago. Year-to-date **exports** are similar to last year averaging 131 thousand barrels per day. By month's end, **stocks** had fallen to 36.2 million barrels, their lowest total for the month in three years and 4.5 million barrels below last September's month-end total.

**Figure H6. Residual, Year-to-Date September Comparisons, 1975-2000**

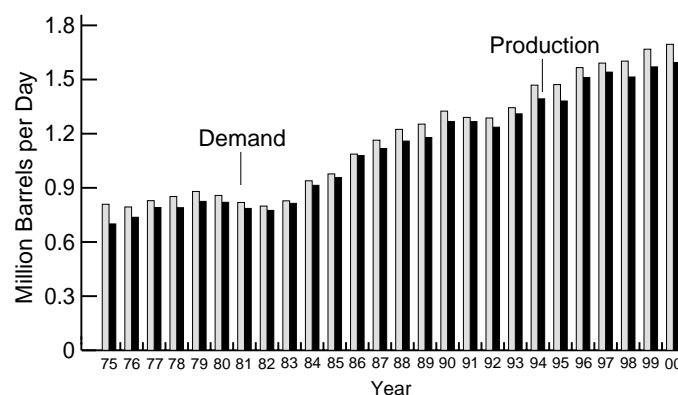


Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

## Kerosene-Type Jet Fuel

**Demand** for kerosene-type jet fuel was exceptionally strong in September, setting a **record high for the month** at an average of 1.8 million barrels per day. Demand for kerosene-type jet fuel also continues its upward trend for the year. The latest data on fuel consumption reflects increased demand from the major airlines as the industry continues to grow.<sup>9</sup> Year-to-date, demand for kerosene-type jet fuel is at the record pace of 1.7 million barrels per day (Figure H7). **Production** of kerosene-type jet fuel, at 1.6 million barrels per day, reached the highest average for the month since the record set in 1996. This year, production of kerosene-type jet fuel is also at a record pace averaging 1.6 million barrels per day. Total **imports** of jet fuel, both kerosene- and naphtha-type, were **down for the month** averaging 132 thousand barrels per day. For the year, imports are averaging 136 thousand barrels per day, slightly off last year's pace. Year-to-date, exports of total jet fuel are normal at an average of 26 thousand barrels per day. **Stocks** of kerosene-type jet fuel ended the month totaling 43.0 million barrels, the lowest total for the month since 1996.

**Figure H7. Kerojet, Year-to-Date September Comparisons, 1975-2000**



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

## Propane

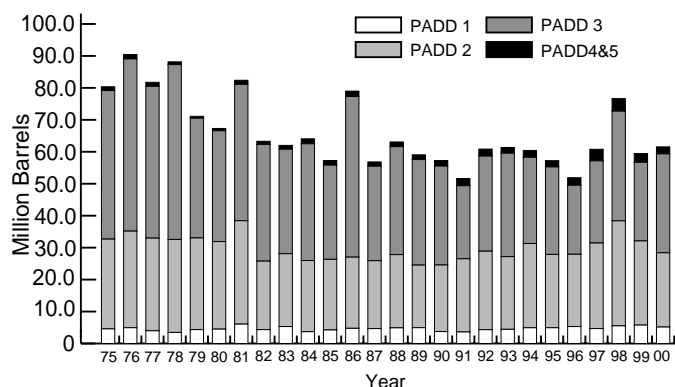
The strong summer stock build continued in September with an above average 3.4 million barrels added to U.S. inventories. By month's end, U.S. inventories of propane stood at 61.5 million barrels, 2.1 million barrels above the year ago total (Figure H8). Despite the strong build this year, total U.S. inventories continue to track near the lower limit of the normal seasonal range. Regionally, stock builds were mixed as inventories along the East Coast fell and gains were posted for the Midwest and Gulf Coast. East Coast inventories fell 528 thousand barrels to 5.2 million barrels by month's end. Despite the exceptionally strong build in the Midwest of 2.4 million barrels, stocks continue below their normal seasonal range for the region. Propane inventories in the Gulf Coast rose 2.0 million barrels to a total of 31.0 million barrels by month's end.

<sup>7</sup>"There Will Be No Shortage of Heating Fuels This Winter, But Prices Will Rise, EIA Says", *The Oil Daily*, October 10, 2000, pg. 2.

<sup>8</sup>"Distillate Watch", *Energy Information Administration*, October 4 and 12, 2000, accessible via the Internet at <http://www.eia.doe.gov/>.

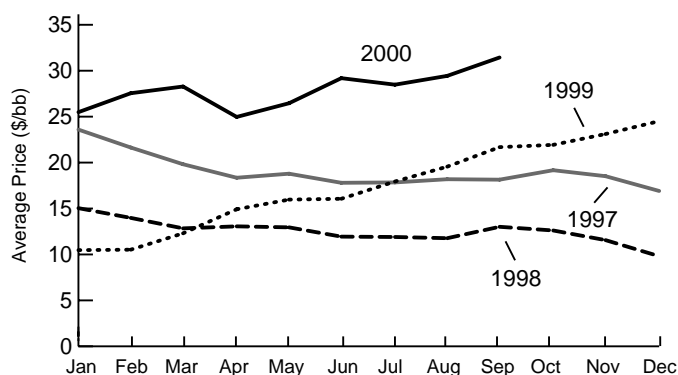
<sup>9</sup>"Fuel Cost And Consumption", *Air Transport Association*, September 26, 2000, accessible via the Internet at <http://www.air-transport.org/>.

**Figure H8. Propane Stocks, Year-to-Year September Comparisons, 1975-2000**



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

**Figure H9. Refiners' Composite Acquisition Cost of Crude Oil, 1997-Present**



Source: Energy Information Administration, *Weekly Petroleum Status Report*, DOE/EIA-0208 (various issues).

## Crude Oil

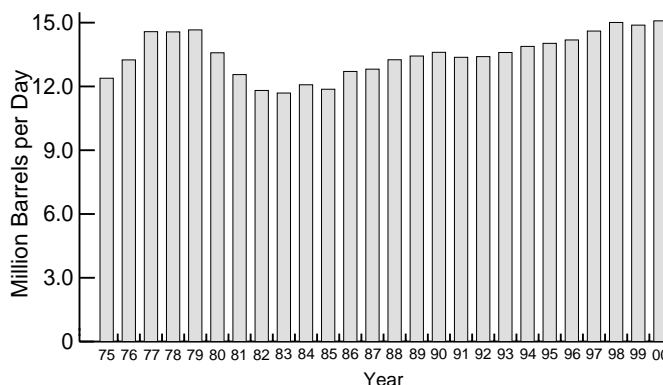
Domestic crude oil **production** slipped in September to 5.8 million barrels per day, the **lowest average for the month since the recent low posted in 1998**. Production, for the year, has also slipped to an average of 5.8 million barrels making this is the lowest average for the period since 1950. Production in Alaska was restricted as the Trans-Alaska Pipeline System (TAPS) shut down for more than a day in order to replace two valves and perform additional maintenance.<sup>10</sup> As a result, Alaskan field production fell to an average of 893 thousand barrels per day, the lowest average for the month since 1977. This year, field production in Alaska is **down 8.1 percent compared to 1999**, averaging only 965 thousand barrels per day. Fresh tensions in the Middle East, in particular accusations made by Iraq aimed at Kuwait, and market worries of insufficient crude oil supplies led crude oil prices higher this month, this was met by a planned release of crude from the U.S.'s SPR in an effort to help cool prices and ease domestic distillate supplies.<sup>11</sup> Crude oil's price rise left the refineries' composite average price of crude oil at an estimated \$31.44 a barrel (Figure H9).<sup>12</sup> Even with higher crude oil prices, **imports** of crude oil averaged 9.2 million barrels per day, **a record high for the month**. This year, imports are up to a record average of 8.9 million barrels per day. Net imports of crude oil, imports minus exports, set a record high for September too, averaging 9.1 million barrels per day. For the year, exports of crude oil are down to an average of 73.1 million barrels per day.

**Stocks** of crude oil, excluding the SPR, fell 3.5 million barrels to a total of 287.0 million barrels by month's end. This represented **the lowest total for the month since 1976**. Total crude oil stocks, including SPR inventories and non-U.S. stocks held under foreign or commercial storage agreements, ended the month at 857.5 million barrels.

## Refinery Operations

Refinery **inputs** of crude oil set a **record high** for the month averaging 15.6 million barrels per day. Since the first of the year, inputs are averaging 15.1 million barrels per day, also a record pace (Figure H10). The estimated refinery **operable utilization rate** (gross input divided by operable capacity) eased this month as routine refinery maintenance commenced at several facilities. Still, the average for the month was higher than last September at 94.7 percent of capacity.

**Figure H10. Year-to-Date September Comparisons for Crude Oil Inputs, 1975-2000**



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

<sup>10</sup>"FY 2001 ANS Production", *Alaska Department of Revenue*, September 2000, accessible via the Internet at <http://www.revenue.state.ak.us/tax/productio n/>.

<sup>11</sup>"Oil Surges Again Amid Fresh Iraq-Kuwait Tension", *Reuters*, October 2, 2000, accessible via the Internet at <http://dailynews.yahoo.com/>.

<sup>12</sup>"Table 19. Prices of Crude Oil and Petroleum Products by PADD", *Weekly Petroleum Status Report*, September 15, 2000, p. 31 & 32.